

Translation

PATENT COOPERATION TREATY

PCT/DE2003/001108



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference GA 02 819 PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/DE2003/001108	International filing date (<i>day/month/year</i>) 04 April 2003 (04.04.2003)	Priority date (<i>day/month/year</i>) 19 April 2002 (19.04.2002)
International Patent Classification (IPC) or national classification and IPC B65D 47/20		
Applicant GAPLAST GMBH		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 1 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☒ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 10 November 2003 (10.11.2003)	Date of completion of this report 17 June 2004 (17.06.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/DE2003/001108

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages 1-11, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the claims:
 pages 2, 13-16, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages 1, filed with the letter of 05 May 2004 (05.05.2004)
- ☒ the drawings:
 pages 1-4, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☒ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☒ the claims, Nos. 2-12
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

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IV. Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees the applicant has:

- ☒ restricted the claims.
- ☐ paid additional fees.
- ☐ paid additional fees under protest.
- ☐ neither restricted nor paid additional fees.

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

- ☐ complied with.
- ☐ not complied with for the following reasons:

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

- ☐ all parts.
- ☒ the parts relating to claims Nos. 1, 2, 13-16

Supplemental Box
(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: IV

Lack of unity of the invention

1. The International Searching Authority has already determined that, for the reasons given below, this international application does not satisfy the requirement of a single general inventive concept (PCT Rule 13.1). The different inventions are as follows:

1. Invention 1 (claims 1, 3-12): one-way valve for the delivery of a free-flowing material, consisting of a valve seat with a base body, which has a through-hole and a projection, and consisting of a seal, which covers the through-hole and surrounds the projection in a spaced-apart manner, an end section of the seal resting against the one end section of the projection when the valve is closed.

2. Invention 2 (claims 1, 2, 13-16): one-way valve, where a sterilisation device is arranged in the flow path of the free-flowing material.

2. The only features common to the two inventions are the features of claim 1. A one-way valve of this kind is already known (see, for example, US 2 016 037 or US 5 692 651). These features cannot therefore be regarded as special technical features (see PCT Rule 13.2). The remaining features of the two inventions solve two different problems, as a result of which the different features cannot be regarded as corresponding

Supplemental Box
(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: IV

technical features.

3. The problem addressed by the first invention is that of ensuring optimal sealing of the one-way valve to prevent contaminants from entering the container. This problem is solved by the special design of the base body and seal of the one-way valve (see page 2, second paragraph; figures 5A and 5B; and claims 3-12).

The problem addressed by the second invention is that of destroying microorganisms that have entered the container. This problem is solved by a sterilisation device being arranged in the flow path of the free-flowing material (see page 3, fourth paragraph; figures 5A and 5B; and claim 5).

4. It is clear that neither the potential special technical features of the two inventions nor their effect are the same or similar, since the problems addressed are different. There is therefore no technical relationship between the inventions based on these features, and the application lacks unity of invention (PCT Rule 13).
5. As a result, the applicant restricted the application to the second invention (claims 1, 2, 13-16).

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims	1, 2, 13-16	YES
	Claims		NO
Inventive step (IS)	Claims	1, 2, 13-16	YES
	Claims		NO
Industrial applicability (IA)	Claims	1, 2, 13-16	YES
	Claims		NO

2. Citations and explanations**1. Reference is made to the following document:**

D1: FR-A-2 738 555 (SOFAB) 14 March 1997
(1997-03-14).

2.1 D1, which is considered to be the closest prior art, discloses (cf. claim 1, page 2, left-hand column, line 67 to right-hand column, line 32; figures 1-5) a one-way valve for the delivery of a free-flowing material from a container having a reducible volume. The subject matter of claim 1 differs therefrom in that the seal is made from a flexible material and in that, radially outside the at least one through-hole, the annular section of the seal is pressed against the valve seat. The subject matter of claim 1 is therefore novel (PCT Article 33(2)).

The problem addressed by the present invention can therefore be considered that of maintaining the sterility of the material inside the container.

The solution to this problem as proposed in claim 1 of the present application involves an inventive step (PCT Article 33(3)): the cited prior art does

not suggest making the seal for a one-way valve as defined in the preamble of claim 1 from a flexible material, nor does it suggest that, radially outside the at least one through-hole, the annular section of the seal is pressed against the valve seat. According to the closest prior art, D1, there is provided an additional spring to bring the seal into a position that seals off the through-hole. Furthermore, radially outside the through-holes, the seal is not pressed against the valve seat.

2.2 Claims 2 and 13 to 16 are dependent on claim 1 and therefore likewise satisfy the PCT novelty and inventive step requirements.

3.1 The two-part form of claim 1 is not correct, since the feature that the valve seat rests with its base body against the interior wall of the container is known from D1 (cf. figures 1-5). Each of the figures 1-5 of D1 shows the cross-sectional faces at the through-holes 5.

The feature that the valve seat is arranged in the container neck is also disclosed in part in D1, since the base body is positioned in the container neck.

3.2 Claims 13 to 16 can be dependent only on claim 2, since that is where a sterilisation device is first defined. The numbering of claims 13 to 16 is inappropriate. Claims 13 to 16 are therefore unclear (PCT Article 6).

3.3 The description has not been brought into line with the amended set of claims and is therefore unclear

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(PCT Article 6).